

Chromomycosis

Clinical presentation

This chronic dermal/epidermal mycosis, also known as chromoblastomycosis is characterised by vegetative and verrucous lesions, which occur predominantly on the lower limbs. In addition erythematous, nodular or ulcerating lesions are sometimes also found.

Pathogens

The pathogens are dark-walled fungi (*Fonsecaea pedrosoi*, *Fonsecaea compacta*, *Cladosporium carionii*, *Phialophora verrucosa* etc.), which are saprophytes on plants and wood.



Chromoblastomycosis. Copyright ITM



Chromoblastomycosis, syn. chromomycosis; hyperkeratotic lesions foot; *Fonsecaea* (*Phialophora*) infection, copyright ITM

Diagnosis

Microscopic examination of crusts in KOH shows the presence of irregular, 10-20 μm large, brown-walled elements with transverse septa, 'sclerotic cells'. The specific causative agent can only be identified by culture.

Treatment

1. Many clinicians find chromomycosis very resistant to antifungal treatment.
2. Surgery if possible (ideal for incipient lesions)

3. Heat therapy, as well as cryotherapy (for lesions with limited extend)
4. Itraconazole : 200-400 mg/day (+ 5-fluorocytosine: 100-150 mg/kg/day)
5. Saperconazole might be more effective than itraconazole
6. Terbinafine : 500 mg/day for 6-12 months, after 2-4 months a reduction of 70% of the sclerotic cells is seen, Cure: 40% after 4 months, 75% after 8 months, 83% after 12 months. Terbinafine might be the first choice treatment.
7. Japan: fluconazole 200 mg/day + heat therapy (improvement after 2 weeks!)
8. Some patients have responded favorable to treatment with amphotericin B
9. Dematiaceous fungi are very sensitive (in vitro) to the new triazoles voriconazole and posaconazole, but further clinical data are needed.
10. The place of the latest triazoles isavuconazole, ravuconazole and albaconazole is still unclear but if a parallel with their action against other fungal infections can be made, they might be promising.